

Information Warfare Analysis Team Mission

- **Identify ACTD Information Warfare (IW) Vulnerabilities**
 - Research emerging threats
 - Assess system strengths and weaknesses
 - Conduct exploitation testing
 - Simulate IW attack scenarios
 - Demonstrate exposure to IW attack
- **Provide ACTD IW Vulnerability Defensive Options**
 - Evaluate and assign risks
 - Propose mitigation and protection strategies and countermeasures

Field Demonstration Team Mission

- **Support ACTD IW Vulnerability Analyses and CINC Exercises**
 - Simulate IW threat
 - Provide full spectrum IW signals collection and analysis
 - Provide OPFOR capabilities
 - Operate communications networks



IWAD, JIOC/J53

Mr Roberto Sandoval (Chief)
robert.sandoval@jioc.osis.gov
(210) 977-4713 DSN: 969-4713
Fax: (210) 977-4596

Major Tom Sobey, USMC (Deputy Chief)

(210) 977-4764 DSN: 969-4764

Field Demonstration Team, JIOC, J532

CPO Lee Duncan, USN (OIC)
rodney.duncan@jioc.osis.gov
(210) 925-3418 DSN: 945-3418
Fax: (210) 925-7130



JIOC/J53

Information Warfare Analysis Division
Joint Information Operations Center
2 Hall Blvd, Suite 217
San Antonio, TX 78243

JWICS <http://www.jioc.ic.gov>
SIPRNet <http://www.jioc.smil.mil>

Information Warfare Analysis Division (IWAD)



**Joint Information
Operations Center
(JIOC)**

San Antonio, Texas

Information Warfare Analysis Division

In 1995, the Deputy Under Secretary of Defense for Advanced Technology chartered a Red Team to identify Information Warfare (IW) vulnerabilities and strengths during Advanced Concept Technology Demonstrations (ACTDs). That group later became the **Information Warfare Analysis Division (IWAD)**, assigned to the Joint Information Operations Center (JIOC) in San Antonio, Texas.

IW Analysis Team

The IWAD is tasked to replicate the IW capabilities of global adversaries and to identify and exploit potential IW weaknesses within the hardware, software, and network components of emerging ACTDs. After researching and analyzing IW weaknesses, the IWAD validates and verifies prospective vulnerabilities using in-house testing facilities and government, academic, and commercial laboratories. IWAD assessments are supported by a suite of analysis tools acquired from open sources and from the Intelligence community.

The Deputy Under Secretary of Defense for Advanced Systems and Concepts (DUSD/AS&C) sponsors the IWAD as part of the Department of Defense ACTD program. DUSD/AS&C is responsible for designating and prioritizing ACTDs for IWAD assessments.

Unclassified <http://www.acq.osd.mil/ACTD/>
SIPRNet <http://jcpat.ncr.disa.smil.mil/actd/index.htm>



IWAD Products and Services

Quick-look Report

- An accelerated high-level examination of ACTD IW vulnerabilities.

Vulnerability Assessment

- An extensive in-depth analysis of ACTD IW threats, risks, vulnerabilities, and countermeasures.

Exercise and Demonstration Support

- Simulation of adversary IW activities.
- Validation of electronic attack effects.

Field Demonstration Team

The Field Demonstration Team, a branch of the IWAD, performs special opposition force (OPFOR) activities in support of worldwide CINC exercises and ACTD demonstrations. This unit is field deployable and self-sustaining, using commercial-off-the-shelf (COTS) tools and equipment that would be available to any adversary. The Field Demonstration Team can simulate an opponent's activities to monitor, collect, analyze, and disrupt electromagnetic emissions, contributing to a realistic IW environment for demonstrations and exercises.

Field Demonstration Team Equipment Suite

TRC-8000 Frequency Collection

- Computer controlled system
- 20 – 3000MHz
- Fixed and mobile site
- Mapping and mission playback
- Real-time Direction Finding (DF) and geo-location
- Frequency hopping intercept capability

SCR-2900 Radar Monitor

- Automated or manual ELINT system
- 0.5MHz – 18GHz
- Collection and analysis
- Omni-directional antennas
- Low profile DF

WINRADIO MS 8006eg Digital Suite

- Multi-channel radio monitoring system
- 0.15 – 1500MHz
- Recording of six receivers simultaneously

VISTA Multiple Receiver

- Fixed or mobile site
- 500KHz – 3000MHz
- DF with mapping capabilities
- Automated / manual spectrum management

COM 120B Communications Analyzer

- Manual spectrum search and management
- Rx 250KHz – 1000MHz

OAR 4400 DF System

- Intercept 500KHz – 2GHz
- DF 500KHz – 1300MHz
- Fixed/Mobile

Mobile INMARSAT Telephones

- Commercial satellite communications
- Secure FAX/data capable

Support Equipment

- Hand held and mobile HF/VHF/UHF radios.
- Logic trunked radios (800MHz)
- Instrumentation and tactical vehicles
- Night vision scopes – GPS technology